

MEDICINE TODAY

Current comment on medical progress, discussion of selected topics from recent books or periodic literature, by contributing members.

Pediatrics

Accessory Sinus Infections in Children.—The present epidemic of upper respiratory tract infection serves to call attention to accessory sinus infections, particularly in children. We think of children as having rudimentary or undeveloped accessory sinuses, but the work of Marriott and Dean demonstrated that children may have sinus development even in late infancy. A simple myringitis is a very common sequel to a mild coryza, and may go on to a definite otitis media of a serous or purulent type.

In every instance of upper respiratory tract infection of infants or children the ears should be carefully examined, using a head mirror and ear speculum or, better still, an electric otoscope. This is a very simple procedure, and one who is familiar with the normal ear drum of an infant or of a young child can readily recognize any abnormal condition.

In such upper respiratory tract infections an associated diarrhea or an unexplained temperature should make one suspicious of ear inflammation. Response to appropriate treatment is surprisingly prompt. Topical applications, such as glycerin or hot irrigations, or incision when the drum membrane shows a definite bulging that is indicative of retained fluid, is rapidly followed by relief of all symptoms and by a sharp drop in temperature.

The discharging nose and the postnasal drip of mucus result in an irritating cough, particularly when the child lies down at night and when he awakens in the morning. Careful examination of the nasal passages will show that the turbinates are somewhat congested and swollen, and there is more or less mucopurulent material in the nasal passages. If the child has been infected with the so-called common cold with persistent nasal discharge after his tonsils and adenoids presumably have been removed, one may think that removal of the adenoids has not been complete. A careful digital examination, however, will show that the discharge comes from the nose. Occasionally, clouding of the antra of Highmore or, in an older child, clouding of the frontal sinuses is shown by x-ray. Too much reliance cannot be placed upon a negative x-ray finding as frequently in acute inflammations of the sinuses no shadows are cast though the sinuses be filled with mucopurulent material.

Study of the accessory sinuses in children should be made with the same degree of care as is necessary in diagnosing an obscure lesion of the chest or abdomen.

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Proctology

Hirschsprung's Disease.¹—This condition is variously known as Hirschsprung's disease, idiopathic congenital dilatation of the colon, megacolon, etc. It is an interesting and definite entity and, although its most characteristic manifestations may be postponed occasionally till adult years, the disease can be demonstrated usually shortly after birth.

The characteristic symptoms are inveterate constipation, infrequency of bowel movements, and great distention of the abdomen. Pathologically there is enormous dilatation and hypertrophy of the colon which, though most common in the sigmoid, may involve the rectum below as far as the anal sphincters and above a portion of the ileum. In fact, should the most satisfactory of surgical procedures be carried out, namely, colectomy, the ileum may later be affected by a similar hypertrophy and distention.

The cause of this peculiar condition is unknown. Rarely there has been discovered an apparent cause, such as a muscular contracted ring at the rectosigmoid junction. Dilatation of this has relieved much of the distress.² More often, however, pathologic changes causing obstruction of the colon, such as tumor, fissure of the anus, chronic volvulus, etc., will neither produce the prolonged constipation nor the degree of abnormal variation which is characteristic of Hirschsprung's disease. This appears to be intrinsic in the walls of the bowel, and has hence given the impression that it is due to a neuromuscular dyscrasia.

Medical treatment may certainly render the majority of patients comfortable although anatomic cure will not result. Such treatment consists mainly of enemata for evacuating the powerless colon. These must be given no less than once a day. The mortality with conservative treatment is still greater than that with surgical treatment, and Finney³ declares that the latter is three times as effective in curing the disease.

Surgical measures have varied from appendicostomy and colostomy to short-circuiting operations such as ileorectostomy and colectomy. Of these, removal of the distressing and intoxicating large bowel is the most beneficial. The disease extends often too near the anus for a suitable short-circuiting operation, and the bowel most often will not empty itself even through an artificial opening.

Recently a new treatment has been brought out which appears to offer considerable possibilities. It is the application of lumbar sympathetic ganglionectomy and ramisectomy, and was developed through the observation by Royle,⁴ that patients

suffering from spastic paralysis were also definitely constipated. Excessive action of the sympathetic nervous system fixes the posture in the large bowel due to the accumulation of feces. A removal, therefore, of this hypertonic nervous control should abolish the lack of muscular recoil and allow peristalsis to proceed.

Of thirteen patients so afflicted, eleven were relieved of their constipation after destruction of sympathetic rami and ganglia.

Following this observation Wade and Royle⁵ planned a special operation for eliminating the action of the lumbar sympathetic system in a case of Hirschsprung's disease. The patient was relieved of the marked constipation and was able to do without further enemata. More recently Judd and Thompson⁶ reviewed the cases of this disease which were treated at the Mayo Clinic. Viewing the radical operation on the colon as a high risk, they tried sympathetic neurectomy. Two patients with Hirschsprung's disease received decided benefit, and within two weeks of the operation were able to have bowel evacuation without enemata or laxatives. In the first patient, the second, third, and fourth lumbar sympathetic ganglia were removed with their communicating nerves on one side. In the second patient the ganglia and nerves were removed on both sides. The latter patient had the entire colon involved.

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REFERENCES

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4. Royle, N. D., and Wade, R. B.: *Med. J. Australia*, 1927, Vol. i, pp. 137-141.
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Bacteriology

Oral Vaccines.—Successful immunization by oral administration of vaccines has been the goal of extensive laboratory and clinical research. Conflicting clinical reports are available as to the value of such vaccines. Suggestive experimental data as to a possible explanation for this lack of clinical agreement have recently been reported by Fränkel¹ of the Cancer Institute, University of Berlin.

Fränkel found that mice given massive oral doses of Shiga vaccine develop no immunity, but become, if anything, more susceptible. With small doses no effects are obtained. It is only with medium sized doses that a distinct immunity develops.

Whether or not his results are applicable to human medicine has not been determined.

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REFERENCE

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Surgery

Observations on Treatment of Gastric and Duodenal Ulcer in Some European Clinics.—Although the treatment of gastric and duodenal ulcer follows along well-recognized lines in the various European clinics which I recently visited, it has not been placed upon an entirely uniform basis. The majority of European surgeons are doing either resection or excision combined with gastro-enterostomy for gastric ulcer. It was only at Hohenegg's clinic in Vienna that simple gastro-enterostomy is being done in some cases in which the gastric ulcer could be readily excised or resected.

The treatment of duodenal ulcer varied to a greater extent. There are three main schools of treatment for duodenal ulcer—the conservative, the radical, and the group between the two. That no absolutely sound principles have been arrived at in the treatment of duodenal ulcer is shown by the various methods used, and is perhaps best exemplified by what has happened at Bier's clinic in Berlin. There they have changed from doing a simple gastro-enterostomy in cases of duodenal ulcer to the radical method of resection, then back again to doing gastro-enterostomy, and at present they take a stand midway between the two.

At the clinics which I visited in Liverpool, Leeds, Edinburgh, Glasgow, and London, I saw only conservative methods in the treatment of duodenal ulcer. Sir Berkeley Moynihan, Walton, and other English surgeons are performing gastro-enterostomy for duodenal ulcer, and their results are good. The occasional occurrence of a jejunal ulcer following this procedure is acknowledged, but the percentage of such ulcers is low, being placed between one and three per cent. As Moynihan expressed it, even if one adds the per cent of occurrence of jejunal ulcer to the low per cent of mortality of gastro-enterostomy, the total percentage is much lower than the per cent of mortality following resection even in the best hands. The English surgeons believe that in properly selected cases the results of gastro-enterostomy are excellent.

Wilkie at Edinburgh is also conservative in his treatment of duodenal ulcer, but in recent years he has been doing a gastroduodenostomy instead of a gastrojejunostomy. In this operation he joins the anterior portion of the stomach near the pylorus to the second portion of the duodenum about opposite the ampulla of Vater. In this procedure it is necessary to mobilize the second and third portions of the duodenum, which can readily be done by incising the peritoneum along the outer or convex border of the duodenum. Wilkie feels that this procedure offers all the advantages of a gastrojejunostomy and practically eliminates the danger of the occurrence of a secondary or stomal ulcer because the acid stomach contents are emptied into the intestine near the same point where the alkaline secretions, bile, and pancreatic juice enter the bowel. The simpler forms of plastic operation are not looked upon with much